

## Refine Search

Your wildcard search against 10000 terms has yielded the results below.

***Your result set for the last L# is incomplete.***

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

### Search Results -

Terms	Documents
L3 and select\$	3

**Database:**

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
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 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

**Search:**

L3 and select\$



**Refine Search**

**Recall Text**



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### Search History

**DATE:** Monday, May 29, 2006    [Printable Copy](#)    [Create Case](#)

#### Set Name Query

side by side

#### Hit Count Set Name

result set

*DB=PGPB,USPT; PLUR=YES; OP=ADJ*

<u>L6</u>	L3 and select\$	3	<u>L6</u>
<u>L5</u>	L3 and portal interface	2	<u>L5</u>
<u>L4</u>	L3 and pay\$	3	<u>L4</u>
<u>L3</u>	L2 and (plurality near3 (banks or (financial adj institutions)))	3	<u>L3</u>
<u>L2</u>	L1 and single near3 (web or site)	26	<u>L2</u>
<u>L1</u>	plurality near3 billers	70	<u>L1</u>

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L5: Entry 2 of 2

File: PGPB

Feb 14, 2002

DOCUMENT-IDENTIFIER: US 20020019808 A1

TITLE: Integrated systems for electronic bill presentment and payment

Summary of Invention Paragraph:

[0007] A second common EBPP approach, which is referred to as the consolidator approach, presents its own set of problems. This method of enabling EBPP trades control of the billing interface and branding opportunity for a reduction in cost, risk, and internal staffing by outsourcing the EBPP to a third party consolidator. Here, the electronic payment processor takes on a lock box function of holding and moving cash during billing and payment. The payment processor performs an aggregation function by presenting multiple billers' statements at a single, consolidating web site. Not only does interposition of the consolidator and its interface between billers and consumers interrupt any existing relationship, but it also precludes exploitation of new biller opportunities to interact with consumers.

Summary of Invention Paragraph:

[0009] Furthermore, conventional EBPP approaches, which seek to implement EBPP on portal interfaces, often require redundant resources supported by multiple entities and consequently waste processing and transport resources. For example, using existing EBPP methods, if a consumer desires to pay AT&T bills electronically at a website such as Yahoo.com., the following occurs. First, the consumer requests that Yahoo.com receive the AT&T bill and send it to the consumer. Then, assuming AT&T partners with an electronic payment facilitator such as CheckFree, Yahoo.com makes a request to CheckFree. Finally, CheckFree initiates the request to AT&T. Because each of these entities are independent, each requires its own resident database and other support functionality. Such conventional portals supported EBPP approaches provide significant opportunity for improvement.

Summary of Invention Paragraph:

[0010] The present invention provides fully integrated, end-to-end electronic bill presentment and payment systems. Such systems support integrated EBPP access and functionality for billers, consumers, banks, other financial institutions, and other electronic payment facilitators, any or all of which can be transacted at a web portal, web site or other interface or virtual space ("Portal Interface"). Such systems can support such activities at multiple portals, so that consumers and others have the choice of paying bills and accomplishing other EBPP transactions in whatever virtual space or at whatever site they desire. The systems provide consumers, billers and others the ability to self-enable EBPP by interacting with the portal interface such as via a series of web pages. Such systems of the present invention can control all interactions between billers and consumers from the portal interface. In addition, the systems can seamlessly orchestrate all other transactions with payment facilitators and banks. Therefore, all EBPP functionality and processes can be controlled by systems and processes according to the present invention.

Summary of Invention Paragraph:

[0011] The Portal Interface controlled by systems of the present invention provides

individual consumers with a secure personalized electronic bill portfolio where they can schedule, view, and pay their electronic bills. The Portal Interface controlled by such systems also enables billers to create consumer accounts and electronically publish their bills on a personalized electronic bill portfolio for viewing and payment. The systems can provide all bill processing, payment processing, consumer and biller data storage, and arrange all external billing transactions.

Summary of Invention Paragraph:

[0014] FIG. 3 is a block diagram illustrating general functionality of a customer-related portal interface supported by a preferred embodiment of integrated electronic bill presentment and payment systems of the present invention.

Summary of Invention Paragraph:

[0015] FIG. 4 is a block diagram illustrating general functionality of a biller-related portal interface supported by a preferred embodiment of integrated electronic bill presentment and payment systems of the present invention.

Summary of Invention Paragraph:

[0016] FIG. 5 is a sign in screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0017] FIG. 6 is a help screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0018] FIG. 7 is an inbox screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0019] FIG. 8 is a bill summary list screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0020] FIG. 9 is a company list screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0021] FIG. 10 is an add a company screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0022] FIG. 11 is a my outbox screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0023] FIG. 12 is a pay accounts screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0024] FIG. 13 is a preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0025] FIG. 14 is a change password screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0026] FIG. 15 is a personal information screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0027] FIG. 16 is payment reminder creation screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0028] FIG. 17 is a generic create a reminder screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0029] FIG. 18 is a contact customer service screenface linked off the preferences screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0030] FIG. 19 is a biller signup screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0031] FIG. 20 is a bill template design step 1 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0032] FIGS. 21 is a bill template design step 3 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0033] FIGS. 22 is a bill template design step 2 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0034] FIG. 23 is an invoice creation step 1 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0035] FIG. 24 is an invoice creation step 2 screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0036] FIG. 25 is an invoice preview screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0037] FIG. 26 is a report builder screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0038] FIG. 27 is a reports screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0039] FIG. 28 is an upload bills screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0040] FIG. 29 is bill quality assurance screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0041] FIG. 30 is a second bill quality assurance screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0042] FIG. 31 is a third bill quality assurance screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0043] FIG. 32 is an add an account screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Summary of Invention Paragraph:

[0044] FIG. 33 is a send customer e-mail screenface of a portal interface generated by a preferred embodiment of systems of the present invention.

Detail Description Paragraph:

[0046] FIG. 1 shows connectivity of a preferred embodiment 10 of integrated electronic bill presentment and payment systems ("systems") of the present invention. System embodiment 10 interfaces with, among other external entities, billers 12, which may include very small and non-recurrent billers 14, banks and other financial institutions 16, payment facilitators 18, web portals and bill presenters 20, and consumers 22. System embodiment 10 shown in FIG. 1 is implemented on a Sun platform using an Oracle database with other programs that allow connectivity via any desired network or transport infrastructure, preferably the Internet, to a portal interface in spaces 20 via an Extensible Markup Language or other standard markup or other common data interchange model or language. Portal interfaces 15 may be implemented in Hypertext Markup Language or as otherwise desired to operate on browsers, whether or not applet enabled, or as otherwise desired.

Detail Description Paragraph:

[0047] FIG. 2 shows an architecture diagram for a preferred embodiment 10 of systems according to the present invention. System embodiment 10 supports a portal interface 15 which allows consumers 22 and billers 12 and/or 14 the ability to self-enable EBPP by interacting with a series of web pages or other interfaces or presentations of whatever desired design or type on a web portal 20 or at any other location in actual, electronic or virtual space, supported by the global information infrastructure, successor systems, private systems or any other communications network or system. System embodiment 10 can enable all EBPP functionality via the portal interface 15. System embodiment 10 can control all interactions or transactions between billers 12 and/or 14 and consumers 22 using portal interface 15 as the communications and/or presentation medium. System embodiment 10 can also arrange all other necessary transactions with payment facilitators 18 and banks 16.

Detail Description Paragraph:

[0049] FIG. 3 illustrates the general functionality of a preferred embodiment of a consumer portal interface supported by system embodiment 10. System embodiment 10 provides consumers 22 a secure personalized portfolio for viewing and paying electronic bills that are input into system embodiment 10 by various billers. System embodiment 10 directs all incoming electronic bills to the bill portfolio of consumers 22. Consumers 22 also have the option of notifying paper-based billers that they desire to have bills presented electronically. System embodiment 10 can notify the billers and initiate electronic scanning of paper bills. Consumers 22 may access the portfolio at any location of choice using any interface, such as, for instance, a conventional web browser, other online device, any wireless device,

or any other device which may communicate with system embodiment 10 in any manner. Any such device is a candidate to support presentation of or transaction with portal interface 15 by consumers 22. Consumers 22 can also define the format of the billing information. For example, the billing data may be supplied to consumers 22 in a variety of standard accounting formats.

Detail Description Paragraph:

[0056] FIGS. 5-18 show web pages of a preferred embodiment of a consumer portal interface on a web portal 20 controlled by system embodiment 10. As mentioned above, the interface 15 can appear on any device in any location in actual, electronic or virtual space, using any network or communications system; use of the web and browser paradigm for the following description is merely one example and should not be interpreted to limit the invention or its scope in any way. That said, FIGS. 5 and 6 show web pages for the initial welcome screens for a web portal 20 of system embodiment 10. As any other web site or web portal 20 on the Internet, the welcome screen and all linked web pages on web portal 20 are freely accessible to billers 12 and/or 14 and consumers 22 using any standard web browsing software and computer. Consumers 22 may also access the web pages by using any device of whatever stripe, such as a personal digital assistant, a cellular phone, or pager, which supports Internet access via wireless technology, standard telephone dial-up or network connections, or any communications system. The welcome screen permits new billers 12 and/or 14 and consumers 22 to create a new account. When setting up a new account, billers 12 and/or 14 and consumers 22 are required to input personal information that can be used to identify and authenticate the user for subsequent sessions. After the user inputs the personal information, the system can contact a credit verifier company, such as Equifax.RTM. or TRW.RTM., and uses a credit report supplied by the company to automatically determine whether the user meets certain predetermined requirements, in which case a new account may be created.

Detail Description Paragraph:

[0059] FIGS. 7-18 show a series of web pages for a personalized bill portfolio management system that registered consumers 22 use to access and interact with a bill portfolio via portal interface 15. FIG. 7 shows an incoming bill web page that enables consumers 22 to interact with all incoming electronic bills including electronic bills that have been received but remain unpaid and paper bills that have been received and scheduled for electronic presentment. For each bill, the web page displays the biller's name, the amount due, the date payment is due, and the status of the bill. Consumers 22 may also select and view each electronic bill. FIG. 8 shows a web page displaying a sample bill summary and payment information. The incoming bill web page also permits consumers 22 to select and electronically pay particular bills.

Detail Description Paragraph:

[0067] The pages described above and shown in FIGS. 5-18 are merely exemplary. In a first sense, each or any of them may contain additional fields, or may contain fewer fields, to solicit or require information of any type or sort, or to allow consumers 22 to interact with system embodiment 10 in any way for the purpose or result of bill payment or reconciliation. In a second sense, other pages may be employed for such results or purposes, or any of the above-mentioned pages may be omitted. Again, these pages are merely one example of an embodiment of a portal interface that can support system embodiment 10 on any platform or device anywhere in actual, electronic or virtual space.

Detail Description Paragraph:

[0076] The pages described above and shown in FIGS. 19-33 are merely exemplary. In a first sense, each or any of them may contain additional fields, or may contain fewer fields, to solicit or require information of any type or sort, or to allow billers 12 and/or 14 to interact with system embodiment 10 in any way for the purpose or result of bill presentment or to effectuate payment or reconciliation. In a second sense, other pages may be employed for such results or purposes, or any

of the above-mentioned pages may be omitted. Again, these pages are merely one example of an embodiment of a portal interface that can support system embodiment 10 on any platform or device anywhere in actual, electronic or virtual space.

CLAIMS:

1. An electronic bill presentment and payment system, comprising: a. a database capable of storing data relating to a plurality of bills sourced from a plurality of billers, and corresponding to a plurality of consumers; b. processing capacity coupled to said database capable of converting data from said plurality of billers into format compatible with said database; c. processing capacity coupled to said database capable of allowing at least some of said plurality of billers to review and obtain reports in real time from data relating to said billers and status of said biller's bills stored in said database; d. said database inaccessible to any entity not having encrypted access to said database; e. processing capacity coupled to said database capable of supporting a plurality of visual interfaces, each supported by a site different from other of said visual interfaces, each of said visual interfaces capable of allowing a consumer to review and pay said consumer's bills and thereby change information in said database only if said consumer has been authorized access to said database by a credit verifier.

2. A system according to claim 1 further comprising processing capacity capable of communicating with a plurality of financial institutions in order to couple said financial institutions to said database in order to facilitate payment of bills.

8. In an electronic billing presentment and payment system comprising: a. a database capable of storing data relating to a plurality of bills sourced from a plurality of billers, and corresponding to a plurality of consumers; b. processing capacity coupled to said database capable of converting data from said plurality of billers into format compatible with said database; c. processing capacity coupled to said database capable of allowing at least some of said plurality of billers to review and obtain reports in real time from data relating to said billers and status of said biller's bills stored in said database; d. said database inaccessible to any entity not having encrypted access to said database; e. processing capacity coupled to said database capable of supporting a plurality of visual interfaces, each at a different web site from other of said visual interfaces, each of said visual interfaces capable of allowing a consumer to review and pay said consumer's bills and thereby change information in said database only if said consumer has been authorized access to said database by a credit verifier; a process for allowing a consumer to pay bills from one of said visual interfaces, comprising: a. receiving from said consumer, via said visual interface, logon information; b. initiating an interactive session with a credit verifier to obtain authorization for said consumer to have access to information from said database; c. after said authorization from said credit verifier has been received from said credit verifier, allowing said consumer to access information in said database in order to pay bills.

10. A process according to claim 8 in which said consumer also reviews a plurality of bills from a plurality of billers.

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